

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

1727 30th Street MS-43

P.O. BOX 168041

SACRAMENTO, CA 95816-8041

FAX (916) 227-6214

TTY 711



*· Flex your power!
Be energy efficient!*

March 30, 2011

04-SM-101-0.9/3.6

04-235634

Project ID 0400000679

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SAN MATEO COUNTY IN MENLO PARK AND EAST PALO ALTO FROM UNIVERSITY AVENUE OVERCROSSING TO ROUTE 84/101 SEPARATION.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, April 13, 2011.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book, and provide a copy of the Non-Storm Water Information package that is added to the Information Handout.

Project Plan Sheets 4, 6, 7, 14, 18, 37, 38, 40, 41, 44, 47, 48, 49, 50, 51, 52, 53, 54, 55, 59, 60, 66, 67, 68, 69, 70, 71, 83, 84, 85, 88, 89, 94, 103, 121, 122, 130, 135, 136 and 162 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

04-SM-101-0.9/3.6
04-235634
Project ID 0400000679

In the Special Provisions, Section 5-1.12, "SUPPLEMENTAL PROJECT INFORMATION," the table in the first paragraph is revised as follows:

Supplemental Project Information

| Means | Description |
|--|---|
| Included in the Information Handout | 1. Foundation Recommendations, Ringwood POC (Replace), Bridge No. 35-0347, dated April 20, 2010 2. Foundation Recommendations, Hetch Hetchy Aqueduct (Widen), Bridge No. 35-0150M, dated March 10, 2010 3. Foundation Recommendations for the Henderson Retaining Wall dated April 19, 2010 4. Foundation Review dated April 21, 2010 5. Material Recommendations 6. Preliminary Geotechnical Report 7. Geotech Retaining Wall Recommendation 8. Corrosion Recommendation 9. Asbestos Lead Survey Report 10. Storm Water Data Report 11. Water Quality Information Handout 12. Preliminary Site Investigation Report 13. Pavement Selection Checklist 14. Project Report 15. General Order 88-B Henderson UP CPUC 16. General Order 88-B Henderson UP 17. SM 101 Caltrain UPRR Clearance Memo 18. Risk Assessment Calculation 19. Non-Storm Water Information Package |
| Available for inspection at the District Office | Site Investigation Report, Corrosion Report, Project Report, Traffic Operational Analysis Report Referee Samples for Architectural Surface |
| Available as specified in the Standard Specifications | Bridge as-built drawings |
| Available at: http://www.dot.ca.gov/hq/esc/oe/weekly_ads/index.php | Cross sections |

04-SM-101-0.9/3.6
04-235634
Project ID 0400000679

In the Special Provisions, Section 5-1.18, "NONHIGHWAY FACILITIES (INCLUDING UTILITIES)," the first paragraph is revised as follows:

The utility owner will relocate a utility shown in the following table before the corresponding date shown:

Utility Relocation and Date of Relocation

| Utility | Location | Date |
|---|--|---------|
| 7-PG&E Poles | NB Pierce Road between station NS3 181+00 to D2 191+00 | 05/2011 |
| T-Mobile - 1"-2" and 2"-6" conduits | Conduits on Pierce Road (parallel to Freeway between station D2 183+50 to D2 187+25) | 07/2011 |
| AT&T duct | NS3 146+50 to NS3 149+00 on NB along the shoulder | 07/2011 |
| AT&T duct | Bohannon Drive @ NS3 143+70 crossing freeway | 07/2011 |

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the ninth paragraph:

"The existing Ringwood Avenue (POC) is not to be demolished until the new POC is open to the public."

In the Special Provisions, Section 10-1.035, "TEMPORARY ACTIVE TREATMENT SYSTEM," is added as attached.

In the Special Provisions, Section 10-1.30, "EARTHWORK," the fourth, fifth and sixth paragraphs are deleted.

In the Special Provisions, Section 10-1.33, "MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALY DEPOSITED LEAD," is revised as attached.

In the Bid book, in the "Bid Item List," Items 58, 85, 124, 125 and 131 are revised, Items 159, 160 and 161 are added and Items 67 and 158 are deleted as attached.

Addendum No. 1
Page 4
March 30, 2011

04-SM-101-0.9/3.6
04-235634
Project ID 0400000679

To Bid book holders:

Replace pages 5, 6, 7, 9, 10 and 11 of the "Bid Item List" in the Bid book with the attached revised pages 5, 6, 7, 9, 10 and 11 of the Bid Item List. The revised Bid Item List is to be used in the bid.

Attached is a copy of the Non-Storm Water Information Package added to the Information Handout.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-235634

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



FDR

REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

10-1.035 TEMPORARY ACTIVE TREATMENT SYSTEM

GENERAL

Summary

This work includes designing, placing, operating, monitoring, maintaining, and later removing a temporary active treatment system. The active treatment system must be used to remove sediment, turbidity, and other pollutants from uncontaminated groundwater, stormwater, or both and then discharge the treated water.

The SWPPP must describe and include the use of temporary active treatment system as a water pollution control practice for non-stormwater management and materials pollution control.

For information on documents under these special provisions, refer to the Department's "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" (Preparation Manual) and "Field Guide to Construction Site Dewatering" (Dewatering Guide).

The Preparation Manual and Dewatering Guide are available from the Department's Construction Storm Water and Water Pollution Control web site at:

<http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>

Non-Stormwater Information Package (Information Package) for this project is available as described in "Project Information" of these special provisions. This Information Package includes the following:

1. Estimated groundwater seepage rates in the project area
2. Dewatering Location Plans
3. List of Publicly Owned Treatment Works (POTW) facility
4. San Mateo County – POTW Service Area

If you do not use an active treatment system, discharge into a POTW system. If uncontaminated groundwater, stormwater, or both are discharged to a POTW, obtain a municipal batch discharge permit. You are responsible for all costs and requirements related to obtaining the municipal batch discharge permit and discharging the water.

Submittals

At least 70 days before dewatering activities start, submit:

1. Dewatering and discharge plan (DDP) that includes:
 - 1.1. Title sheet
 - 1.2. Table of contents
 - 1.3. Certification and approval sheet (Section 100 of the Preparation Manual)
 - 1.4. Amendment log and format (Section 200 of the Preparation Manual)
 - 1.5. Description and schedule of the dewatering and discharge operations
 - 1.6. Discharge alternatives, including:
 - 1.6.1. Reuse of treated water for construction activities such as dust control, irrigation, fill compaction, or concrete batch plant
 - 1.6.2. Percolation
 - 1.6.3. Storm sewers
 - 1.6.4. Surface waters

- 1.7. Treatment system description and components
 - 1.8. Anticipated flow rates
 - 1.9. Operation and system maintenance procedures and example maintenance log
 - 1.10. Field-recorded data, visual inspection, and calibration procedures and example logs
 - 1.11. Measuring equipment descriptions
 - 1.12. Working drawings for dewatering and discharge operations showing:
 - 1.12.1. Section and plan views of storm water effluent treatment systems
 - 1.12.2. Location of sampling points for water quality measurements
 - 1.12.3. Flow path and placement of pipes, hoses, pumps, holding tanks, and other equipment used to convey water
 - 1.12.4. General position of treatment dewatering and discharge components relative to excavations or other operations requiring dewatering
 - 1.12.5. Point of storm water discharge
2. Daily Inspection Report. The report form must:
- 2.1. Be approved by the Engineer before use
 - 2.2. Include discharge volumes
 - 2.3. Include water quality monitoring records
 - 2.4. Include discharge point information for:
 - 2.4.1. Date and time
 - 2.4.1. Weather conditions including wind direction and velocity
 - 2.4.1. Presence or absence of water fowl or aquatic wildlife
 - 2.4.1. Color and clarity of the effluent discharge
 - 2.4.1. Erosion or ponding downstream of the discharge site
 - 2.4.1. Photographs labeled with the time, date, and location
3. POTW municipal batch discharge permit, if used
4. If you use chemical coagulants, in-line flocculants, or both, in the treatment system, submit a Coagulant Prevention Plan (CPP) with the DDP. The CPP must include:
- 4.1. Description of the best management practices (BMPs) to prevent accidental spillage, overfeeding into the treatment system, or other mishandling of coagulant agents
 - 4.2. Monitoring plan for all coagulant or flocculant agents to be used
 - 4.3. Description of the agent (chemical and trade name description)
 - 4.4. Determination of acute and chronic toxicity for aquatic organisms conforming to EPA methods for the agents
 - 4.5. Monitoring proposal to detect residual agent at concentrations at or below established acute toxicity levels for freshwater and marine conditions for that agent
 - 4.6. Copy of the documentation showing RWQCB approval of the CPP and approval of the chemical coagulants or in-line flocculants proposed

The CPP must be approved by the RWQCB. It is your responsibility to obtain approval of the CPP from the RWQCB. If the RWQCB does not approve your proposal to use chemical coagulants or in-line flocculants, you must propose an alternative treatment system component to comply with the receiving water and effluent discharge limitations.

Within 15 days after contract approval, submit 3 copies of the DDP. Allow 15 days for the Engineer's review. If revisions are required, the Engineer provides comments and specifies the date that the review stopped. Revise and resubmit the DDP within 7 days of receipt of the Engineer's comments. The Engineer's review resumes when the complete DDP is resubmitted. When the Engineer approves the DDP, submit 4 copies of the approved DDP to the Engineer. After approval, the Engineer submits a copy of the approved DDP to the California Regional Water Quality Control Board (RWQCB) for their review and comment. If the RWQCB provides comments to the DDP, amend the DDP. Construction activities must start no sooner than 30 days after the Engineer approves the DDP. If the Engineer fails to complete the review within the time allowed and if, in the opinion of the Engineer, completion of the work is delayed or interfered with because of the Engineer's or the RWQCB's review, you will be compensated for resulting losses, and an extension of time will be granted, under Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Quality Control and Assurance

Retain and submit records of temporary active treatment system including:

1. Delivery and removal of temporary active treatment system components.
2. Daily inspection report that includes all information and recorded data collected. This report must be certified as true and accurate and signed by those who gather the information.

MATERIALS

Active Treatment System

Design and implement an appropriate active water treatment system for the site conditions and anticipated flow rate. The active treatment system must include:

1. Treatment system
2. Collection and conveyance system
3. Discharge method

Treatment System

The treatment system must be capable of removing sediment and turbidity-producing suspended solids. Primary and secondary treatment may be required, or the design of the treatment system may require combined use of the various treatment components in series to achieve effective treatment. Treatment system must have components to:

1. Remove sediment and turbidity-producing suspended solids such as:
 - 1.1. Desilting basins
 - 1.2. Settling tanks
 - 1.3. Sediment traps
 - 1.4. Gravity bag filters
 - 1.5. Sand media filters
 - 1.6. Pressurized bag filters
 - 1.7. Cartridge filters
 - 1.8. Chemical coagulants including in-line flocculants
 - 1.9. Temporary holding tanks
 - 1.10. Any combination of these systems to provide primary and secondary treatment
2. Adjust pH or dissolved oxygen by:
 - 2.1. Addition of sulfuric, phosphoric, citric, or nitric acid in conformance with the supplier's specifications for treatment of water with high pH
 - 2.2. Filtration through a limestone bed or addition of sodium hydroxide for treatment of water with low pH
 - 2.3. Aeration for treatment of water with low dissolved oxygen

Collection and Conveyance System

Provide pumps and piping to convey the water from the point of dewatering to the treatment system and to the point of discharge. Pumps and piping must comply with Section 74-2, "Drainage Pump Equipment," of the Standard Specifications.

Use a flow meter to measure all discharges from dewatering operations.

Discharge Method

Provide a method for discharging treated water and include a discharge location. Do not discharge treated water in a way that impacts natural bedding or aquatic life.

Discharge treated water:

1. For dust control in active work areas.
2. To land where the grade allows sheet flow and the soil allows infiltration.
3. In a way that does not cause erosion or scour. If scour occurs, repair the damage and install a velocity dissipater.

CONSTRUCTION

Placement

Place active treatment system components at the job site:

1. Before dewatering work
2. In the immediate area of the dewatering work as approved by the Engineer
3. Away from construction traffic or public access areas

Operation

Divert stormwater away from excavations that would require dewatering.

Water quality limits must comply with the receiving water limitations monitoring and discharge effluent limitations monitoring requirements under section titled "Monitoring" of these special provisions. If observations and measurements confirm the water quality limits are exceeded:

1. Stop the discharge immediately
2. Notify the Engineer
3. Start corrective measures to modify, repair, or replace the equipment used to discharge treated water

After the Engineer inspects and accepts corrective measures:

1. Resume dewatering and discharge operations
2. Start startup-phase sampling requirements before regular-phase sampling requirements
3. Start regular-phase sampling requirements

Relocate active treatment system as needed for dewatering work.

Monitoring

Comply with the manufacturer's instructions for all calibrations of the flow meter. Perform calibrations in the presence of the Engineer.

While the active treatment system is operated, perform:

1. Flow rate monitoring to:
 - 1.1. Record daily discharge volumes
 - 1.2. Compute average daily volumes

2. Receiving water limitations monitoring. In the receiving storm water drainage system, the discharge must not cause:
 - 2.1. Downstream turbidity to increase to more than 50 Nephelometric Turbidity Units (NTU) if the natural background turbidity is less than 50 NTU
 - 2.2. Downstream turbidity to increase more than 10 percent above the natural background turbidity if the natural background turbidity is 50 NTU or greater
 - 2.3. Normal ambient temperature to be altered more than 5 degrees F
 - 2.4. Normal ambient pH to fall below 6.5, exceed 8.5, or change more than 0.5 units
 - 2.5. Dissolved oxygen concentration to fall below 5.0 mg/L
3. Discharge effluent limitations monitoring. The water to be discharged (effluent) must comply with the following:
 - 3.1. Discharged water turbidity must not be greater than 50 Nephelometric Turbidity Units (NTU)
 - 3.2. pH of the discharged water must be from 6.5 to 8.5
 - 3.3. Discharged water must not contain chlorine in excess of 0.02 mg/L (instantaneous maximum)

Follow these procedures to take water quality measurements to verify requirements for receiving water limitations and discharge effluent limitations:

1. For discharges of water that exceed 4 hours in duration occurring within a 24-hour period:
 - 1.1. If the discharge may affect the receiving body of water in a storm water drainage system, take measurements at the background and receiving water sampling locations no more than 1 hour before discharging treated water.
 - 1.2. Startup-phase sampling includes stormwater runoff, background, and receiving water measurements taken during the first 3 days of discharge. Start start-up phase sampling 10 to 30 minutes after measurable runoff occurs during a storm. Take samples on regular intervals during the storm. Take at least 4 samples for each discharge lasting 4 hours or more. The time between sampling must not exceed 4 hours.
 - 1.3. Regular-phase sampling includes effluent, background, and receiving water measurements that occur after the 3rd day of operation. Do regular-phase sampling at least twice daily. Take samples at regular intervals.
 - 1.4. If there is a noticeable change in color or clarity in the receiving body of water, take additional effluent, background, and downstream measurements.
 - 1.5. If an initial measurement shows that water quality limits are exceeded, take an additional measurement no less than 15 minutes and no more than 1 hour after the initial measurement.
 - 1.6. If the second test confirms the limits were exceeded, revert to the startup-phase sampling requirements before resuming regular-phase sampling.
 - 1.7. For cofferdam maintenance dewatering, regular-phase monitoring may be discontinued after 10 days if the effluent and receiving water measurements are consistently below the water quality limits.
2. For water discharges less than 4 hours in duration occurring within a 24-hr period:
 - 2.1. If the discharge may affect the receiving body of water in a storm water drainage system, take measurements at the background and receiving water sampling locations no more than 1 hour before discharging treated water.
 - 2.2. Take effluent, background, and receiving water measurements from 10 to 30 minutes after initiating discharge. Continue to take measurements every hour.
 - 2.3. If an initial measurement shows that water quality limits are exceeded, take an additional measurement no more than 15 minutes after the initial measurement.
 - 2.4. If there is a noticeable change in color or clarity in the receiving body of water, take additional effluent, background, and downstream measurements.

3. For all discharges of water:

- 3.1. Measure for stormwater effluent turbidity and pH at the end of the outfall or in-line sampling port.
- 3.2. Measure receiving water turbidity, pH, and dissolved oxygen at a point within 15 feet downstream of the discharge point.
- 3.3. Measure for natural background turbidity, dissolved oxygen, and pH at a location that is from 9 to 15 feet upstream of the discharge point. If other construction activity is being performed, measure at least 150 feet upstream of the discharge point.
- 3.4. If the discharge is made into a surface body of water, or into a stormwater drainage system that produces an observable effect on a surface body of water, monitor the receiving water.

4. For receiving water and natural background measurements:

- 4.1. If the receiving water is deeper than 3 feet, take depth-averaged measurement by taking samples from 3 points within the water column and averaging the 3 measurements:
 - 4.1.1. 12 inches below the surface.
 - 4.1.2. Mid-depth.
 - 4.1.3. 12 inches above the bottom.
- 4.2. If the receiving water is less than 3 feet in depth, take measurement 12 inches below the surface.

Comply with the manufacturer's instructions for use and calibrations of meters and devices for taking water quality measurements. Perform calibrations in the presence of the Engineer.

Inspection

Inspect temporary active treatment system:

1. Daily if dewatering work occurs daily
2. Weekly if dewatering work does not occur daily

Reporting

If observations and measurements confirm the water quality limits are exceeded:

1. Submit a Notice of Discharge Report as shown in the Preparation Manual within 3 business days of exceeding the limits
2. Document the reasons and corrective work performed to prevent a reoccurrence in the Notice of Discharge

Maintenance

Maintain the various components to prevent leaks and provide proper function. If a component of the dewatering equipment is not functioning properly, discontinue the dewatering operation and repair or replace the component.

Sediments removed from uncontaminated areas during maintenance of the treatment system must be dried, distributed uniformly, and stabilized at a location within the project limits approved by the Engineer.

Removal

Backfill and repair ground disturbance, including holes and depressions, caused by the installation and removal of the temporary active treatment system. Comply with Section 15-1.02, "Preservation of Property," of the Standard Specifications.

PAYMENT

The contract lump sum price paid for temporary active treatment system includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in designing, implementing, monitoring, maintaining, and later removing the temporary active treatment system, including disposal of accumulated sediment, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.33 MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALY DEPOSITED LEAD

Earthwork involving material containing aerially deposited lead shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Attention is directed to "Aerially Deposited Lead" of these special provisions.

Type Z-2 material contains aerially deposited lead in average concentrations (using the 95 percent Upper Confidence Limit) greater than or equal to 1000 mg/kg total lead; greater than or equal to 5.0 mg/L soluble lead (as tested using the California Waste Extraction Test) and the material is surplus; or greater than 3397 mg/kg total lead. Type Z-2 material exists as shown on the plans. This material is hazardous waste regulated by the State of California and shall be transported to and disposed of at an appropriately permitted commercial landfill. Material excavated from these areas shall be transported by a hazardous waste transporter registered with the DTSC using the required procedures for creating a manifest for the material. The vehicles used to transport the hazardous material shall conform to the current certifications of compliance of the DTSC.

LEAD COMPLIANCE PLAN

Submit a lead compliance plan under Section 7-1.07, "Lead Compliance Plan," of the Standard Specifications.

EXCAVATION AND TRANSPORTATION PLAN

Within 15 days after approval of the contract, the Contractor shall submit 3 copies of an Excavation and Transportation Plan to the Engineer. The Engineer will have 7 days to review the plan. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the plan within 7 days of receipt of the Engineer's comments. The Engineer will have 7 days to review the revisions. Upon the Engineer's approval of the plan, 3 additional copies incorporating the required changes shall be submitted to the Engineer. Minor changes to or clarifications of the initial submittal may be made and attached as amendments to the Excavation and Transportation Plan. In order to allow construction to proceed, the Engineer may conditionally approve the plan while minor revisions or amendments are being completed.

The Contractor shall prepare the written, project specific Excavation and Transportation Plan establishing the procedures the Contractor will use to comply with requirements for excavating, stockpiling, transporting, and placing (or disposing) of material containing aerially deposited lead. The plan shall conform to the regulations of the DTSC and Cal-OSHA. The sampling and analysis portions of the Excavation and Transportation Plan shall meet the requirements for the design and development of the sampling plan, statistical analysis, and reporting of test results contained in USEPA, SW 846, "Test Methods for Evaluating Solid Waste," Volume II: Field Manual Physical/Chemical, Chapter Nine, Section 9.1. The plan shall contain, but not be limited to the following elements:

- A. Excavation schedule (by location and date),
- B. Temporary locations of stockpiled material,
- C. Sampling and analysis plans for areas after removal of a stockpile,
 - 1. Location and number of samples,
 - 2. Analytical laboratory,
- D. Dust control measures,
- E. Transportation equipment and routes,
- F. Method for preventing spills and tracking material onto public roads,
- G. Truck waiting and staging areas,
- H. Landfill used for disposal of material containing aerially deposited lead,
- I. Spill Contingency Plan for material containing aerially deposited lead.

DUST CONTROL

Excavation, transportation, placement, and handling of material containing aerially deposited lead shall result in no visible dust migration. The Contractor shall have a water truck or tank on the job site at all times while clearing and grubbing and performing earthwork operations in work areas containing aerially deposited lead.

STOCKPILING

Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or one foot of nonhazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

MATERIAL TRANSPORTATION

Prior to traveling on public roads, loose and extraneous material shall be removed from surfaces outside the cargo areas of the transporting vehicles and the cargo shall be covered with tarpaulins or other cover, as outlined in the approved Excavation and Transportation Plan. The Contractor shall be responsible for costs due to spillage of material containing lead during transport.

The Department will not consider the Contractor a generator of the hazardous material, and the Contractor will not be obligated for further cleanup, removal, or remedial action for such material handled or disposed of in conformance with the requirements specified in these special provisions and the appropriate State and Federal laws and regulations and county and municipal ordinances and regulations regarding hazardous waste.

DISPOSAL

The disposal site shall be operating under a permit issued by the appropriate Environmental Protection Agency board or department.

The Engineer will obtain the Environmental Protection Agency Generator Identification Number for hazardous waste transport or disposal. The Engineer will sign all hazardous waste manifests. The Contractor shall notify the Engineer 5 business days before the manifests are to be signed.

Sampling, analyzing, transporting, and disposing of material containing aerially deposited lead excavated outside the pay limits of excavation will be at the Contractor's expense.

MEASUREMENT AND PAYMENT

Quantities of roadway excavation (aerially deposited lead) and structure excavation (aerially deposited lead), of the types shown in the Engineer's Estimate, will be measured and paid for in the same manner specified for roadway excavation and structure excavation, respectively, in Section 19, "Earthwork," of the Standard Specifications.

Full compensation for preparing an approved Excavation and Transportation Plan, transporting material containing aerially deposited lead reused in the work from location to location, and transporting and disposing of material containing aerially deposited lead shall be considered as included in the contract prices paid per cubic yard for the items of roadway excavation (aerially deposited lead) and structure excavation (aerially deposited lead) of the types involved, and no additional compensation will be allowed therefor.

No payment for stockpiling of material containing aerially deposited lead will be made, unless the stockpiling is ordered by the Engineer.

BID ITEM LIST

04-235634

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 41 | 019471 | ADJUST INLET TO GRADE | EA | 22 | | |
| 42 | 152439 | ADJUST FRAME AND GRATE TO GRADE | EA | 7 | | |
| 43 | 152604 | MODIFY INLET | EA | 2 | | |
| 44 | 152609 | MODIFY INLET TO MANHOLE | EA | 1 | | |
| 45 | 019472 | REMOVE UNDERDRAIN | LF | 890 | | |
| 46 | 153103 | COLD PLANE ASPHALT CONCRETE PAVEMENT | SQYD | 85,100 | | |
| 47 | 153210 | REMOVE CONCRETE | CY | 1.3 | | |
| 48 | 153214 | REMOVE CONCRETE CURB | LF | 2,180 | | |
| 49 | 153215 | REMOVE CONCRETE (CURB AND GUTTER) | LF | 4,390 | | |
| 50 | 153218 | REMOVE CONCRETE SIDEWALK | LF | 2,130 | | |
| 51 | 153231 | REMOVE CONCRETE BARRIER (TYPE 50C) | LF | 500 | | |
| 52 | 155003 | CAP INLET | EA | 2 | | |
| 53 | 157550 | BRIDGE REMOVAL | LS | LUMP SUM | LUMP SUM | |
| 54 | 157560 | BRIDGE REMOVAL (PORTION) | LS | LUMP SUM | LUMP SUM | |
| 55 | 160101 | CLEARING AND GRUBBING | LS | LUMP SUM | LUMP SUM | |
| 56 | 170101 | DEVELOP WATER SUPPLY | LS | LUMP SUM | LUMP SUM | |
| 57 | 190101 | ROADWAY EXCAVATION | CY | 13,400 | | |
| 58 | 190105 | ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD) | CY | 21,200 | | |
| 59 | 190110 | LEAD COMPLIANCE PLAN | LS | LUMP SUM | LUMP SUM | |
| 60 (F) | 192003 | STRUCTURE EXCAVATION (BRIDGE) | CY | 325 | | |

BID ITEM LIST

04-235634

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|-----------|-----------|--|-----------------|--------------------|------------|------------|
| 61 (F) | 192037 | STRUCTURE EXCAVATION (RETAINING WALL) | CY | 896 | | |
| 62 | 192053 | STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD) | CY | 371 | | |
| 63 (F) | 193003 | STRUCTURE BACKFILL (BRIDGE) | CY | 305 | | |
| 64 (F) | 193013 | STRUCTURE BACKFILL (RETAINING WALL) | CY | 660 | | |
| 65 (F) | 193031 | PERVIOUS BACKFILL MATERIAL (RETAINING WALL) | CY | 95 | | |
| 66 | 193114 | SAND BACKFILL | CY | 10 | | |
| 67 | BLANK | | | | | |
| 68 | 198007 | IMPORTED MATERIAL (SHOULDER BACKING) | TON | 45 | | |
| 69 | 198205 | SUBGRADE ENHANCEMENT GEOTEXTILE | SQYD | 870 | | |
| 70 | 200001 | HIGHWAY PLANTING | LS | LUMP SUM | LUMP SUM | |
| 71 | 019473 | MULCH (EROSION CONTROL) | CY | 410 | | |
| 72 | 203002 | EROSION CONTROL (COMPOST BLANKET) | CY | 14 | | |
| 73 | 203025 | COMPOST (INCORPORATE) | SQYD | 4,990 | | |
| 74 | 203026 | MOVE-IN/MOVE-OUT (EROSION CONTROL) | EA | 6 | | |
| 75 | 203031 | EROSION CONTROL (HYDROSEED) (SQFT) | SQFT | 51,600 | | |
| 76 | 203034 | ROLLED EROSION CONTROL PRODUCT (NETTING) | SQFT | 13,600 | | |
| 77 | 019474 | LINER PLANTS (PLANT GROUP M) | EA | 770 | | |
| 78 | 204096 | MAINTAIN EXISTING PLANTED AREAS | LS | LUMP SUM | LUMP SUM | |
| 79 | 204099 | PLANT ESTABLISHMENT WORK | LS | LUMP SUM | LUMP SUM | |
| 80 | 206401 | MAINTAIN EXISTING IRRIGATION FACILITIES | LS | LUMP SUM | LUMP SUM | |

BID ITEM LIST

04-235634

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 81 | 208000 | IRRIGATION SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 82 | 220101 | FINISHING ROADWAY | LS | LUMP SUM | LUMP SUM | |
| 83 | 250401 | CLASS 4 AGGREGATE SUBBASE | CY | 11,300 | | |
| 84 | 260201 | CLASS 2 AGGREGATE BASE | CY | 310 | | |
| 85 | 280000 | LEAN CONCRETE BASE | CY | 8,640 | | |
| 86 | 390131 | HOT MIX ASPHALT | TON | 14,400 | | |
| 87 | 390140 | RUBBERIZED HOT MIX ASPHALT (GAP GRADED) | TON | 26,100 | | |
| 88 | 394060 | DATA CORE | LS | LUMP SUM | LUMP SUM | |
| 89 | 394074 | PLACE HOT MIX ASPHALT DIKE (TYPE C) | LF | 245 | | |
| 90 | 394076 | PLACE HOT MIX ASPHALT DIKE (TYPE E) | LF | 3,730 | | |
| 91 | 397005 | TACK COAT | TON | 49 | | |
| 92 | 401108 | REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) | CY | 40 | | |
| 93 | 019475 | REPAIR SPALLED JOINTS (POLYESTER GROUT) | SQYD | 40 | | |
| 94 | 490603 | 24" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 1,382 | | |
| 95 | 490605 | 36" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 483 | | |
| 96 | 490607 | 48" CAST-IN-DRILLED-HOLE CONCRETE PILING | LF | 150 | | |
| 97 | 500001 | PRESTRESSING CAST-IN-PLACE CONCRETE | LS | LUMP SUM | LUMP SUM | |
| 98 (F) | 510051 | STRUCTURAL CONCRETE, BRIDGE FOOTING | CY | 92 | | |
| 99 (F) | 510053 | STRUCTURAL CONCRETE, BRIDGE | CY | 732 | | |
| 100 (F) | 510060 | STRUCTURAL CONCRETE, RETAINING WALL | CY | 385 | | |

BID ITEM LIST

04-235634

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 121 | 019476 | 8" PLASTIC PIPE | LF | 30 | | |
| 122 | 650014 | 18" REINFORCED CONCRETE PIPE | LF | 410 | | |
| 123 | 682008 | PERMEABLE MATERIAL (BLANKET) | CY | 340 | | |
| 124 | 019477 | GEOMEMBRANE (IMPERMEABLE LINER) | SQYD | 940 | | |
| 125 | 685020 | 8" ALTERNATIVE PIPE UNDERDRAIN | LF | 2,430 | | |
| 126 | 703233 | GRATED LINE DRAIN | LF | 260 | | |
| 127 | 703508 | 6" WELDED STEEL PIPE (.105" THICK) | LF | 140 | | |
| 128 | 705206 | 24" CONCRETE FLARED END SECTION | EA | 1 | | |
| 129 | 731502 | MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION) | CY | 370 | | |
| 130 | 731517 | MINOR CONCRETE (GUTTER) | LF | 604 | | |
| 131 (F) | 750001 | MISCELLANEOUS IRON AND STEEL | LB | 19,200 | | |
| 132 (F) | 750501 | MISCELLANEOUS METAL (BRIDGE) | LB | 1,178 | | |
| 133 | 800302 | CHAIN LINK FENCE (TYPE CL-3, VINYL-CLAD) | LF | 140 | | |
| 134 | 800360 | CHAIN LINK FENCE (TYPE CL-6) | LF | 160 | | |
| 135 | 832003 | METAL BEAM GUARD RAILING (WOOD POST) | LF | 490 | | |
| 136 (F) | 833034 | CHAIN LINK RAILING (TYPE 7L) | LF | 1,548 | | |
| 137 | 839521 | CABLE RAILING | LF | 590 | | |
| 138 | 839581 | END ANCHOR ASSEMBLY (TYPE SFT) | EA | 2 | | |
| 139 | 839585 | ALTERNATIVE FLARED TERMINAL SYSTEM | EA | 5 | | |
| 140 | 839701 | CONCRETE BARRIER (TYPE 60) | LF | 160 | | |

BID ITEM LIST

04-235634

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 141 | 839704 | CONCRETE BARRIER (TYPE 60D) | LF | 590 | | |
| 142 | 839706 | CONCRETE BARRIER (TYPE 60G) | LF | 410 | | |
| 143 | 019478 | CONCRETE BARRIER (TYPE 60R) | LF | 90 | | |
| 144 | 840504 | 4" THERMOPLASTIC TRAFFIC STRIPE | LF | 136,000 | | |
| 145 | 840506 | 8" THERMOPLASTIC TRAFFIC STRIPE | LF | 6,390 | | |
| 146 | 840515 | THERMOPLASTIC PAVEMENT MARKING | SQFT | 670 | | |
| 147 | 840523 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3) | LF | 11,200 | | |
| 148 | 840526 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7) | LF | 170 | | |
| 149 | 850101 | PAVEMENT MARKER (NON-REFLECTIVE) | EA | 11,600 | | |
| 150 | 850111 | PAVEMENT MARKER (RETROREFLECTIVE) | EA | 5,180 | | |
| 151 | 860090 | MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION | LS | LUMP SUM | LUMP SUM | |
| 152 | 861504 | MODIFY LIGHTING AND SIGN ILLUMINATION | LS | LUMP SUM | LUMP SUM | |
| 153 | 019479 | MODIFY TRAFFIC OPERATION SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 154 | 019480 | MODIFY LIGHTING AND SIGN ILLUMINATION (STAGE CONSTRUCTION) STAGE 1 | LS | LUMP SUM | LUMP SUM | |
| 155 | 019481 | MODIFY LIGHTING AND SIGN ILLUMINATION (STAGE CONSTRUCTION) STAGE 2 | LS | LUMP SUM | LUMP SUM | |
| 156 | 019482 | MODIFY TRAFFIC OPERATIONS SYSTEM (STAGE CONSTRUCTION) STAGE 1 | LS | LUMP SUM | LUMP SUM | |
| 157 | 019483 | MODIFY TRAFFIC OPERATIONS SYSTEM (STAGE CONSTRUCTION) STAGE 2 | LS | LUMP SUM | LUMP SUM | |
| 158 | BLANK | | | | | |
| 159 | 074015 | TEMPORARY ACTIVE TREATMENT SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 160 | 719589 | MINOR CONCRETE (BACKFILL) | CY | 70 | | |

BID ITEM LIST

04-235634

| | | | | | | |
|-----|--------|--------------|----|----------|----------|--|
| 161 | 999990 | MOBILIZATION | LS | LUMP SUM | LUMP SUM | |
|-----|--------|--------------|----|----------|----------|--|

**TOTAL BID
FOR ITEMS:**

\$ _____

**TOTAL BID
FOR TIME:**

| | | | | |
|--------------------------|---|--------------|---|----------|
| _____ | X | \$11,406.00 | = | \$ _____ |
| WORKING DAYS BID | | COST PER DAY | | |
| (Not to exceed 268 Days) | | | | |

TOTAL BID FOR COMPARISON (COST PLUS TIME):

\$ _____